Finding of No Significant Impact
ARS Johnston Draw Fire Effects Research
Environmental Assessment DOI-BLM-ID-B030-2014-0001

I have reviewed the Council on Environmental Quality Regulations (CEQ) for significance (40 CFR 1508.27) and have determined the actions analyzed in **DOI-BLM-ID-B030-2014-0001** would not constitute a major federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not required. This finding was made by considering both the context and intensity of the potential effects, as described in the above EA, using the following factors defining significance:

1) Impacts that may be both beneficial and adverse.

The beneficial effects of Alternative B are:

1. The project will contribute to a long-term research and management plan under development by the USDA Agriculture Research Services (ARS) Northwest Watershed Research Center (NWRC) for assessing prescribed fire impacts in the Reynolds Creek Experimental Watershed (Section 1). Research includes the following parameters: measuring prescribed fires influence on vegetation diversity, wildlife habitat, and weed response in mountain big sagebrush, and mountain shrub communities; measuring and modeling prescribed fire effects on soil properties, infiltration, runoff, surface erosion and downstream water quality; evaluating the effects of prescribed fire on the water balance of upland soils and streamflow through field measurements and application of hydrologic models; assessing vegetation recovery after prescribed fire relative to post-fire livestock management and fire severity; and evaluating airborne remote sensing as a tool for assessing pre- and post-fire vegetation status, fuel characteristics, and fire severity patterns (Section 1.1).

2. The Johnston Draw area is currently in a vegetation state typical of early juniper encroachment (Phase I to early Phase II). This prescribed burn will reduce juniper thus returning vegetation to a sagebrush community which will create long-term beneficial effects to sagebrush obligate species (Section 3.4.2.2).
3. Treating juniper in the project area would provide long lasting benefits to wildlife by protecting existing sagebrush steppe, meadow, spring, and riparian habitats, and provide the opportunity for those habitat types to recover from the detrimental effects of juniper encroachment (Section 3.4.2.2).
4. Erosion typically increases in juniper dominated areas. With reduction of juniper in the project area and returning vegetation to a sagebrush community, erosion in the area will ultimately decrease compared with a complete conversion of shrublands to woodlands (Section 3.1.2.2).

The adverse effects of Alternative B are:

1. The proposed fire will burn across allotment boundaries, therefore there is potential for damage to allotment fences (Section 3.6.1).
2. Moderate, short-term (1-2 days) negative impact on air quality and visibility in the form of smoke and dust emissions, predominantly in the Particulate Matter (PM) 10 and PM 2.5 size range, may impact the local project area (Section 3.5.2.2).
3. Runoff and erosion from a decrease in vegetation may increase for the first one to two years post burn (Section 3.1.2.2).

2) The degree to which the proposed action affects public health or safety.

The use of prescribed fire during juniper treatment would result in a moderate, short-term, negative effect on air quality and visibility during and immediately following the actual activity. Air quality effects would be in the form of dust and smoke which are predominantly between PM 10 and PM 2.5. This planned activity is not expected to exceed any state and/or federal air quality standards based on the types of fuels and size of burns. Smoke would be noticeable over a wide area of northern Owyhee County, southern Canyon County, and southern Ada County for 1-2 days post burn (Section 3.5.2.2)

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands. wetlands, wild and scenic rivers, or ecologically critical areas.

No park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas (e.g., Areas of Critical Environmental Concern) are in close proximity. There are fourteen cultural resource sites in the project area predominantly on private land, ten which require mitigation to protect them from adverse effects during all implementation phases of the proposed project. Mitigation measures will be designed in consultation with the Idaho State Historic Preservation Office. With mitigation measures in place, there will be no adverse effects to any eligible or unevaluated cultural resource site (Section 3.3.2.2).

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effect on the quality of the human environment is expected to be minimal and short term. Air quality will worsen for a short duration after the burn. During the day smoke is expected to be carried by upper level winds and dispersed; however, during the night smoke is likely to settle in the Reynolds Creek canyon and valley until it is dispersed by afternoon winds. No issues were presented by the public concerning the likelihood of adverse effects on the quality of the human environment (Section 3.5.2.2).

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There is a risk that the prescribed burn could burn beyond the intended project boundary. Mitigation measures such as bulldozer lines, spring blacklining, and burning under a specific set of conditions, as outlined in the burn plan, are in place to prevent this from occurring (Section 2.3.2).

6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration*.

The actions and practices analyzed in the EA are normal practices that have been successfully implemented elsewhere. This EA does not set a precedent for future actions that have significant effects. Consequently, the scientific knowledge that will be gained from ARS's watershed research has the potential to be beneficial and supportive of future landscape scale prescribed burn treatments.

7) *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

This EA considered potential cumulative impacts of the Proposed Action and alternatives. Such analysis concluded that implementation will not result in significant cumulative effects on soil, biological, cultural, or social resources, even when considered in relation to other actions.

8) *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National registry of Historic places (NRHP) or may cause loss or destruction of significant scientific, cultural, or historical resources.*

Cultural resource surveys were conducted in the project area. Based on those surveys and the analysis in the EA, the proposed action would not result in loss or destruction of significant scientific, cultural, Native-American, or historical resources. Mitigation measures to protect ten cultural sites within the treatment units will be in effect during implementation of the project (Section 3.3.2.2).

9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has determined to be critical under the Endangered Species Act of 1973.*

There are no endangered or threatened species within the prescribed burn area. The prescribed fire is expected to have few direct effects to wildlife due to the small size of the project area and the ability of wildlife to survive such events. The indirect effects of the prescribed fire would be beneficial to sagebrush obligates and species closely associated with sagebrush steppe habitat (Section 3.4.2.2).

10) *Whether the action threatens a violation of Federal, State, and local laws or requirements imposed for protection of the environment.*

The proposed action analyzed in the EA was developed in accordance with all applicable Federal, State, and local laws/regulations for the protection of the environment. The EA discloses the potential effects of the proposed action on all critical and non-critical elements. It was determined that the proposed action would not adversely or significantly affect any of these elements.

/s/ *Michelle Ryerson* December 29, 2014

Michelle G. Ryerson
Acting Field Office Manager
Owyhee Field Office

Date